

## **Phthalates - the Next “Phosphate”?**

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Phthalates – poorly known yet ubiquitous toxic pollutants – present a major challenge for public education and control. Phthalates are chemicals used as plasticizers and solvents in household, beauty and industrial products. Some phthalates act as reproductive and developmental toxins and recently have been linked to asthma and allergies in children. The cumulative effect of phthalates and other toxic chemicals is unknown.

Phthalates occur in almost half of our nation’s more than 1,600 Superfund sites. In the Duwamish River Superfund Site, phthalates occur in “hot spots” associated with combined sewer and stormdrain outfalls. Bis(2-ethylhexyl)phthalate (DEHP), one of the most common phthalates, has been detected in 4 of 19 chinook salmon fillet samples collected from the river.

Seattle, King County, and Tacoma staff are sampling automotive and household products as well as stormdrains and catchment basins to track down sources of phthalates as part of the Lower Duwamish Waterway and Thea Foss Waterway source control programs. High phthalate concentrations have been found in some products such as auto fan belts (up to 3,900 ppb DEHP), used cigarette butts (up to 210 ppm di-n-butylphthalate) and Styrofoam packing peanuts (up to 670 ppm butylbenzylphthalate). Examples of DEHP concentrations in sediment samples from onsite catchbasins associated with land uses in the Duwamish drainage were: auto repair – up to 824 ppm, grocery – up to 225, transportation – up to 772, and retail – up to 941. So far, no single “smoking gun” source has been identified.

The Duwamish River Cleanup Coalition and other groups are conducting outreach to raise awareness about phthalates in general. Human health concerns linked to phthalates in cosmetics and household products are helping to familiarize the public with the chemical and advocate for its control. Toxic beauty products may be the key to citizen action.